



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,193	08/10/2001	Thad E. Starnier	062004-1800	3820

24504 7590 12/22/2003

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
100 GALLERIA PARKWAY, NW
STE 1750
ATLANTA, GA 30339-5948

EXAMINER

NEGRON, ISMAEL

ART UNIT PAPER NUMBER

2875

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,193

Applicant(s)

STARNER ET AL.

Examiner

Ismael Negron

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-19, 21, 30 and 31 is/are rejected.
- 7) ☐ Claim(s) 5, 29 and 230 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Title

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **Image Capturing and Analyzing Apparatus for Controlling Electrical Devices.**

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "*image-capturing device configured as a pendant and a pin*" (claim 5) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 4, 11-15, 19 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims recite an image capturing system capable of monitoring certain conditions of the user without disclosing (in the specification or the drawings) the way in which such conditions are identified. The specification is silent as to the procedure, algorithms, protocols, etc., etc. used by the claimed invention to perform the functions recited by the claims.

Claim Rejections - 35 USC § 103

4. Claims 1-4, 6-19, 21-28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over MARRIN et al. (U.S. Pat. 5,875,257).

MARRIN et al. discloses a motion detection switch having:

- **a light emitting device**, Figure 3, reference number 215;
- **the light emitting device illuminating an object**, column 2, lines 62-65;
- **an image forming device**, Figure 3, reference number 220;
- **the image forming device forming one or more images due to light that is reflected from the object**, column 5, lines 57-60;
- **a processor**, Figure 3, reference number 210;

- **the processor analyzing the motion of the object to control at least one electrical device**, Figure 3, reference number 240;
- **the electrical device being a music synthesizer, a controllable music playback device, a virtual reality system, a display, or a video game**, column 6, lines 27-29;
- **the various conditions being monitored including tempo, emphasis, position, direction, speed or velocity, size and placement**, column 8, lines 20-48;
- **the light emitting device being one of the group consisting of a plurality of light emitting diodes (LED)**, column 5, line 45;
- **the emitted light being infrared light**, column 5, lines 45-47;
- **the object being a hand and/or a baton**, column ;
- **the processor being coupled to the image forming device via a network**, column 5, lines 37-44;
- **the user making different gestures to control the at least one electrical device**, column 10, lines 1-20.

MARRIN et al. discloses all the limitations of the claims except the various conditions being monitored including tremors, Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, hypothermia and drinking habits, and wherein the user is one of a machine, a human being, a robot, and an animal; or the light emitting device, the image forming device and the processor being configured to be portable

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the apparatus of MARRIN et al. to monitor conditions such as including tremors, Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, hypothermia and drinking habits, and wherein the user is one of a machine, a human being, a robot, and an animal, to be able to provide indication of a health condition to medical personnel. In addition, it is noted that the apparatus of MARRIN et al., being capable of detecting tempo, emphasis, position, direction, speed or velocity, size and placement, includes all the structure necessary to perform the claimed function.

Regarding the claimed system being configured to be portable, it would have been obvious to one of ordinary skill in the art at the time the invention was made to MARRIN et al., since it has been held that making a device portable or movable without producing any new modification in function or manufacture involves only ordinary skill in the art. *In re Lindberg*, 93 USPQ 23 (CCPA 1952). One of ordinary skill in the art would have been motivated to add portability to the device of MARRIN et al. to make such device easier to transport and use in a wide variety of applications. Even further, the disclosure of MARRIN et al. implies portability by reciting a self-contained power supply and a wireless communication capability as part of the patented invention (see column 5, lines 5-9 and 37-44).

Relevant Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fraden (U.S. Pat. 4,450,351), **Chen** (U.S. Pat. 4,768,020) and **Chen** (U.S. Pat. 5,258,899) disclose motion detectors.

Krueger et al. (U.S. Pat. 4,483,568), **Neely et al.** (U.S. Pat. 5,148,477), **Gerrissen et al.** (U.S. Pat. 5,319,747), **Korth** (U.S. Pat. 5,767,842), **Hoffberg et al.** (U.S. Pat. 5,901,246), **Kazama et al.** (U.S. Pat. 6,111,580) and **Hsieh** (U.S. Pat. 6,154,558) disclose various types of motion and gesture perception analyzers, for controlling electrical devices.

Allowable Subject Matter

6. Claims 5, 20 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Applicant teaches an image capturing system formed into a pendant or pin, such system having a light-emitting device (Led), an image-forming device, and a processor. The processor analyzing the motion of an object illuminated by the Led, to control electrical devices.

No prior art was found teaching individually, or suggesting in combination, all of the features of the applicants' invention, specifically an image capturing system for controlling an electrical device, such system formed into a pin or pendant.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (703) 308-6086. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (703) 305-4939. The facsimile machine number for the Art Group is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, consisting of a stylized, cursive 'J' followed by a horizontal line.

Inr

December 12, 2003